

Fact Sheet



For Final Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on March 15, 2011.

Permit Number: **R30-02300003-2011**

Application Received: **June 11, 2014**

Plant Identification Number: **03-54-023-00003**

Permittee: **Virginia Electric and Power Company**

Facility Name: **Mt. Storm Power Station**

Mailing Address: **5000 Dominion Boulevard, Glen Allen, VA 23060**

Permit Action Number: *SM02*

Revised: *January 2, 2015*

Physical Location: Mt. Storm, Grant County, West Virginia
UTM Coordinates: 649.85 km Easting • 4340.00 km Northing • Zone 17
Directions: Off of State Route 93, two (2) miles west of Bismark. From the intersection of Route 93 into Davis, WV continue east on Route 93 for approximately 8 miles.

Facility Description

Dominion's Virginia Electric and Power Company's Mt. Storm Power Station is a coal-fired electric generation facility and operates under SIC code 4911 and NAICS code 221112. The facility consists of three (3) coal-fired boilers, two with a rated design capacity of 6199 mmBtu/hr each and one with a rated design capacity of 5,824 mmBtu/hr, an oil-fired auxiliary boiler with a rated design capacity of 150 mmBtu/hr, and various supporting operations such as coal handling, ash handling, limestone handling, and various tanks with insignificant emissions. The Mt. Storm Power Station has the potential to operate seven (7) days per week, twenty-four (24) hours per day and fifty-two (52) weeks per year.

Emissions Summary

The change in potential emissions associated with the significant modification (SM02) is as follows:

Pollutants	Change in Potential Emissions, TPY
CO	+1.83
NO _x +HC(VOC) emissions	+1.44

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility has the potential to emit 205,560 tons per year of SO₂; 47,168.20 tons per year of NO_x; 1,573.83 tons per year of CO; 3,077 tons per year of PM₁₀; and 710 tons per year of HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Virginia Electric and Power Company's Mt. Storm Power Station is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR13	Permits for Construction, Modification, Relocation and Operation of Stationary sources
	45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40 C.F.R. Part 60
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for Hazardous Air Pollutants
	40 C.F.R.60 Subpart Da	Standards of Performance for Electric Utility System Generating Units
	40 C.F.R.60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
	40 C.F.R. Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
	40 C.F.R. Part 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE).
State Only:	None	

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

The following is the only permit related to this modification:

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
G60-C056A	January 2, 2014	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

This significant modification includes: 1) the addition of requirements for emergency generators (MTST-00-FP-ENG-1, Communication Tower, SW-EG-1, SW-EG-2, SW-EG-3, SW-EG-4, SW-EG-5) from G60-C056A; 2) an update to the design capacity for Unit 1 Boiler; and 3) the addition of 40 C.F.R. 63 Subpart ZZZZ requirements for existing emergency generators (MTST-00-FP-ENG-3, MTST-00-EG-DG-1A, and MTST-00-EG-DG-1B).

General Permit, G60-C056A has been attached to this permit. The changes due to G60-C056A are as follows:

- Emission Point IDs- MS79, MS80, MS81, MS82, MS83, MS84 and MS85 have been added to the Emission Unit Table.
- Emission Point ID- MS59 (Diesel Fire Pump) has been updated in the Emission Unit Table. The company replaced this fire pump because the old one was the original (mid-1960's) diesel engine and it had passed the point where it was economical to maintain. So, the company replaced it with the Clarke/John Deere JU6H-UFADX8 that is in the General Permit. The company assigned it the same emission unit ID because it is in the exact same location in the facility as the old fire pump.
- Section 8 has been added for RICE requirements for Emission Unit IDs- MTST-00-FP-ENG-1, Communication Tower, SW-EG-1, SW-EG-2, SW-EG-3, SW-EG-4, SW-EG-5.
 - Emission Unit ID- MTST-00-FP-ENG-1 is a New Emergency Stationary CI Engine ≤500 HP Located at a Major Source of HAP. This Engine is subject to 40 CFR part 60, subpart IIII (CI NSPS). According to 40CFR§63.6590(C) (6), compliance with 40CFR63 Subpart ZZZZ will be met by complying with 40 CFR60 Subpart IIII.
 - Emission Unit ID- Communication Tower is an Existing Emergency Stationary (SI) Engine ≤500 HP Located at a Major Source of HAP. This Engine is subject to 40CFR 63 Subpart ZZZZ requirements.
 - Emission Unit IDs- SW-EG-1, SW-EG-2, SW-EG-3, SW-EG-4, SW-EG-5 are New Emergency Reconstructed Stationary SI Engines ≤500 HP Located at a Major Source of HAP. These Engines are subject to 40 CFR part 60, subpart JJJJ (SI NSPS). According to 40CFR§63.6590(C)(6), compliance with 40CFR63 Subpart ZZZZ will be met by complying with 40 CFR60 Subpart JJJJ.

The changes related to Unit 1 Boiler are as follows:

- The design capacity of Unit 1 Boiler was increased and has been updated in this permit. The design capacity of Unit 1 was changed as a result of an upgrade that the company did on the unit. This upgrade was allowed under the consent decree with WV DAQ and USEPA. The company notified the DAQ of this project in a letter dated December 29, 2010. Although that letter does not specifically mention the heat input capacity increase, that increase is what triggered NSPS Subpart Da. The nature of the projects was such that the company did the upgrade on Unit 2 first, and its rated heat input capacity was changed in a previous permit. Now, Unit 1 has been upgraded and the design capacity of Unit 1 Boiler has been updated in this permit to reflect that. Units 1 and 2 should have matching heat input capacities as they are now substantially identical (upgraded) units.
- Since this upgrade triggered NSPS Subpart Da applicability, Condition 7.1.7 has been updated. Condition 7.1.7 was updated to match the current language in 40 CFR 60.48a (f) (as applicable to units that commenced modification prior to May 3, 2011).

The 40 C.F.R. 63 Subpart ZZZZ requirements for MTST-00-FP-ENG-3, MTST-00-EG-DG-1A, and MTST-00-EG-DG-1B have been added in Section 8.0.

- Emission Unit ID- MTST-00-FP-ENG-3 is an Existing Emergency Stationary (CI) Engine ≤ 500 HP Located at a Major Source of HAP. The applicable requirements are included in conditions 8.1.3, 8.1.5, 8.1.6, 8.2.3, 8.4.3, 8.5.3, and 8.5.4.
- Emission Unit IDs - MTST-00-EG-DG-1A and MTST-00-EG-DG-1B are Existing Emergency Stationary (CI) Engines > 500 HP Located at a Major Source of HAP. These engines are only subject to 40 C.F.R. §63.6605 as specified by 40 C.F.R. §63.6600(c).

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

40 CFR 64

The existing Title V permit contains monitoring that meets the definition of “continuous compliance demonstration method. Therefore in accordance with 40 CFR §64.2(b)(vi), this facility is exempt from the requirements of 40 CFR Part 64. The increased throughput included in this significant modification does not change the CAM applicability for the emission units at the Mt. Storm station.

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: October 28, 2014
Ending Date: December 1, 2014

Point of Contact

All written comments should be addressed to the following individual and office:

Beena Modi
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1228 • Fax: 304/926-0478
Beena.j.modi@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

None